

properties of a magnet.” It has been brought to Applicant’s attention, however, that the Examiner appears to be working with a different, broader definition. The Examiner, at least in part, is relying on art disclosing metals which could be magnetized, but neither the circumstances nor any specific teaching suggests that they are “magnetized.” Hence, applicant recites “magnetized magnetic material.”

Method claim 1 has been altered to remove the recitation to “trapping,” which verbiage had not been given any appreciable patentable weight and whose scope was causing confusion. Claim 1 instead now recites a method of “controlling” insects. See specification, pages 2 and 3. Such terminology should avoid the definitional issues raised with “trapping.” The limitation of slipping into or onto a trap proximate the composition has also been deleted, since again, the Examiner found that almost any particulate material inherently embodies such possibility, and thus the phrase had received essentially no patentable weight.

The particulate composition is thus now referred to as an “insect-adhering” particulate composition including at least one of a pesticide or insect behaviour modifying chemical and at least one “magnetized magnetic material.” The composition is further located in the path of the insect, to effect the controlling

The wording of a few claims has been further changed to keep the wording consistent.

REMARKS

General

Applicant appreciates the Examiner’s telephone interview of February 14, 2006 and subsequent response. Applicant called to request feedback as to the applicant’s prior arguments filed, i.e. requested a Response to Arguments section of the Action, distinguishing the claims as they existed from the prior art. The gist of the matter now appears to be that certain of the prior claim phraseology was simply not receiving any appreciable patentable weight. As discussed above, this claim phraseology has been altered to phrases which should receive due patentable weight. The remarks below reflect that change. Some terms were causing unnecessary confusion and have been changed. Some terms needed clarifying.

Inventorship and Double Patenting Rejection

As indicated by the previously filed Judgment from the Court of Appeals in the UK, faxed on 3/9/06 to the Examiner, the issue of inventorship of the priority document and the PCT

application appears to have been settled. We have circulated a Rule 48 Request to correct inventorship, to be executed by all involved “inventors” and assignees. Such shall be filed in the matter of Serial Number 09/736,0123, naming Colin Metcalfe as the sole inventor, as soon as possible.

Rejection Under § 112 Second Paragraph of Claim 1, and Claims 2-7 and 31 that depend thereon, as Indefinite.

Claims 1-7 and 31 were rejected as not setting forth any positive method steps to perform “trapping and/or killing.” Claim 1 as now amended recites a method of “controlling” insects, as per the specification pages 2 and 3. This change of phraseology should resolve this issue. More particularly, a method of controlling insects is claimed wherein at least a part of insect to be controlled is exposed to an “insect-adhering” particulate composition. One improvement lies in the step of including in the particulate composition at least one pesticide or insect behaviour modifying chemical and at least one “magnetized magnetic material.” The further step of locating the composition proximate a path of the insect is recited. Applicant submits that claims 1-7, and 31, as now recited, are not subject to a §112 second paragraph rejection for indefiniteness. The amended reference to “controlling” resolves the trap/structure issue and the recitation of “including in the particulate material ...” and “locating the composition in a path of the insect” recite positive method steps for controlling.

Claim 4 was further rejected under §112 second paragraph because the phrase “adhere by a magnetic force to a surface which is inclined to the horizontal” was not clearly recited “as part of the trap and can be interpreted as any inclined surface on which the particles are deposited.” But the latter is true. In a method of “controlling” insects, that includes a particulate composition including a pesticide or behaviour modifying chemical and a magnetized magnetic material, and that includes locating the composition proximate the path of the insect, the surface (to which particles may adhere by a magnetic force) need only be located proximate the path of the insect. (Reference in the claim to a trap or trapping has been omitted.)

Rejections Over Marston, Yaffe or Gref - §102

Method Claims 1-7 and 31; Composition Claims 32-43

Remarks Appropriate to Independent Claims 1 and 32, and Thus to All Claims Cited

Applicant submits that neither Marston, Yaffe or Gref disclose an insect controlling composition or method that includes, in an “insect-adhering” composition, at least one of a pesticide or insect behaviour modifying chemical and at least one “magnetized magnetic material.”

There is no teaching or suggestion that the cobalt oxide and iron powder, or iron rod or steel ball or roller bearing, recited by Marston, or the iron recited by Yaffe, was magnetized. A “magnetized magnetic material” is not taught or suggested by Marston or Yaffe. It would have no foreseeable benefit under their inventions. The intended use of Marston’s cobalt oxide is as a “relatively low-density biologically active substance,” while the use and function of the “iron powder” is to provide “a relatively higher density matrix” to increase the density of the cobalt oxide pellets. The use of the “iron” in Yaffe is to provide a suitable core material, where pesticidal granules comprising a coated core are asserted to have benefits, such as uniformity in size, specific gravity, percent of toxicant and rate of toxicant release. See column 3 of Yaffe. Thus, Marston and Yaffe do not anticipate, without more.

In re claim 1, Marston further does not teach locating a particulate composition in a path of an insect. The insecticide portion of Marston’s particle for ruminants must be transported by bodily fluids to the skin of the animal in order to reach a path of insects. Marston does not teach or suggest that his particulate composition itself is transmitted by bodily fluids to the skin of the insect.

Gref does not teach or suggest a particulate composition including a pesticide and a magnetized magnetic material. Under “pharmaceutical uses” Gref discloses injectable nano-particles that can include magnetic particles useful as contrast agents for diagnostic imaging. See column 2 lines 52-53 and columns 5-7. In general, for pharmaceutical use particles, the substances that could be included are molecules that can be bound to the nano-particles to target them to a particular site in the body and biologically active materials that can be incorporated into the particles, (including contrast agents for imaging purposes. Again, the “magnetic particles” are contrast agents that can be included in injectable nano-particles for a pharmaceutical use of diagnostic imaging; this comprises one of many “pharmaceutical” uses.)

In column 14, under “non-pharmaceutical” uses (for his nano-particles when combined with some agent,) Gref recites the uses of: (1) delivery of food additives including stabilizers and dispersants or other viscosity modifying agents; (2) controlled and selective delivery of pesticides,

herbicides, insecticides, fertilizers and pheromones; (3) in color and ink formulations in the printing and ink industry.

Thus, Gref discloses a variety of substances that can be incorporated into his nanoparticles for a wide variety of uses, including pharmaceutical and non-pharmaceutical. Gref does NOT teach or suggest, however, including in the “pharmaceutical use” particles pesticides, herbicides, insecticides, fertilizer and pheromones. Such is NOT a taught or suggested. Including pesticide, etc. agents is expressly a non-pharmaceutical use, and the non-pharmaceutical uses have no need for “contrast agents” for MRI. Thus, nowhere does Gref teach or suggest including both a pharmaceutical use agent, (e.g. a contrast agent, a magnetic particle,) and a non-pharmaceutical use agent, e.g. a pesticide or an insecticide, in one particle for any use. No one of skill in the art would read Gref as teaching such combination. Gref’s magnetic particle agent lies in a subset of the “pharmaceutical use” area. The pesticide and insecticide agent lies in a subset of the “non-pharmaceutical use” areas. Gref, thus, does not anticipate, without more.

Since the above references fail to anticipate or render obvious the independent claims, the dependent claims are allowable without more. However, certain points in regard to anticipation and/or obviousness of dependent limitations are pointed out below.

Certain Dependent Claims

(Obviousness) Rejections of Dependent Claims Based on Above Three References (and Klaveness).

Re Strontium Ferrite

There is an absence of evidence that strontium ferrite is safe and non-toxic and suitable for pharmaceutical uses, including ingestion by ruminants, as the Examiner proposes. Neither Marston nor Gref exhibit such teaching or suggestion. There is also no evidence from Klaveness that strontium ferrite is non-toxic and suitable for pharmaceutical use.

Re Hard Magnetic Material, Ferrites, Strontium Ferrite

Hard magnetic material, ferrites and strontium ferrite are, relatively speaking, expensive and specialized materials. There is no motivation or teaching to incorporate such expensive and/or otherwise specialized magnetic materials into the composition of Marston or Yaffe, to substitute for either cobalt oxide, iron powder, iron rod or steel ball or roller bearing or iron. (The Examiner points to no “low-density biologically active” features.) The “magnetic

properties” of hard magnetized magnetic material and/or strontium ferrite add nothing to the inventions of Marston and Yaffe. Resort to such materials would add unnecessary expense. They are not recited or taught or suggested. There is an absence of motivation to modify these two references to incorporate such specialized materials.

The Examiner asserts specifically that it would have been obvious to substitute strontium ferrite in Marston for cobalt oxide and iron powder. Applicant respectfully traverses. The Examiner recites, as a matter of law, that it is obvious to select another known material on the basis “of its suitability for the intended use” and that strontium ferrite would be suitable because it is an alloy exhibiting “magnetic properties.” But applicant’s “magnetic properties” have nothing to do with Marston’s pellets. Marston did not select cobalt oxide or iron powder as suitable for his invention because of its “magnetic properties.” Magnetic properties did not render cobalt oxide suitable as a “low-density biologically active substance” or iron powder suitable “to increase the density,” which are their intended uses in Marston’s invention. See Marston column 4 lines 31 and following. The Examiner points to no disclosure in Marston that indicates that cobalt oxide or iron powder is suitable for use in Marston because of such magnetic property.

The same is true of Yaffe. Yaffe’s iron is not selected for its “magnetic properties” but rather as a suitable material to form a core for leaching or dispensing insecticides. There is no motivation, suggestion or teaching for substituting for the iron, another material because of its “magnetic properties.” “Magnetic properties” are irrelevant to Yaffe’s purposes.

Regarding Combination of Soft and Hard Magnetic Materials.

The Examiner points to no teaching or suggestion in the art cited of a combination of hard and soft magnetized magnetic materials. That there is no teaching of ratios of such combinations.

Limitation of Particle Diameter Size in the Range of from 2-100 μ m Over Yaffe as Obvious.

The Examiner recites it would be a matter of design choice for Yaffe to make the particle size diameter in the range of 2-100 micrometers. Applicant respectfully traverses. Yaffe teaches away from small particle size. The point and purpose of Yaffe’s invention is to produce granules large enough such that they do not disperse as powder when aired in the atmosphere. Reducing Yaffe’s particle size would destroy Yaffe’s invention. Particle size is also important to applicant’s invention because “insect-adhering” particles are required. Yaffe teaches away from small


particles. The benefit of granular formations of pesticides, as compared with dusts, for Yaffe is that dusts are subject to aerial drift. See Yaffe column 1.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Sue Z. Shaper, Applicants' Attorney at 713 550 5710 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

4/13/06
Date


Sue Z. Shaper
Attorney/Agent for Applicant(s)
Reg. No. 31663

Sue Z. Shaper
1800 West Loop South, Suite 1450
Houston, Texas 77027
Tel. 713 550 5710